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RubberWorld

Trends in tire, vehicle development

Study of cured tire heat build-up

Tire design engineering

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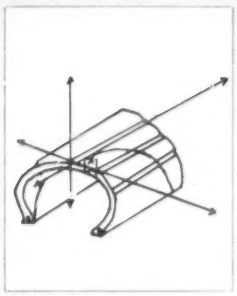

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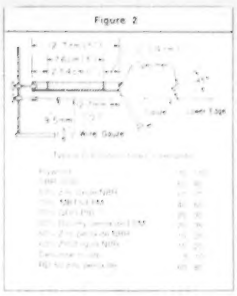

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by K.F. Sarver, Firestone Tire and Rubber Co. This article focuses on the areas of CAD/CAE which support the tire development process, with particular emphasis on radial passenger and light truck tires.

30 Study of heat build-up of a cured tire using a Goodrich Flexometer

by S.K. Chakraborty and D.P. Mukherjee, J.K. Industries, Ltd., India. In addition to presenting a study of a cured tire tested in the Goodrich Flexometer for its relative heat build-up, this article offers a comparative study of different types of tires.

36 Safer zinc peroxide dispersions

by Richard F. Grossman and Frank W. McKane Jr., Synthetic Products Co. Applications where zinc oxide can be used successfully as a delayed action crosslinking agent for carboxylated NBR compounds are presented in this article, as well as applications where various retarded grades of zinc oxide or zinc oxide dispersions are appropriate.

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Cover

Cover photo courtesy of Uniroyal Goodrich Tire Co.

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Business Briefs

Acquisitions, expansions

Polysar is buidling a hydrogenated nitrile rubber plant in Orange, TX to be completed by the fall of 1988 and will have an annual capacity of 3.5 million pounds.

Dunlop is undergoing a $44 million capital expenditure program for modernization of its radial tire production facilities in Huntsville, AL that will raise the production level to 25,000 tires per day when completed in May of 1988.

RMA rubber report through February
(figures in metric tons)

	Cumulative 1987	Cumulative 1986	%
Total new rubber			
New rubber available	554,858	502,322	10.46
Imports	190,277	181,328	4.94
Exports	77,011	62,324	23.57
Apparent consumption	464,238	438,081	5.97
Total natural rubber			
Imports	144,070	140,222	2.74
Exports	6,884	7,220	4.65
Apparent consumption	135,319	131,263	8.42
%total new rubber	29.14	29.96	
Total synthetic rubber			
Production	364,581	320,994	13.58
Imports	46,207	41,106	12.41
Exports	70,127	55,106	27.26
Apparent consumption	328,918	306,817	7.20
Total SBR			
Production	139,168	123,940	12,29
Imports	13,944	15,023	-7.18
Exports	26,543	15,549	70.71
Apparent consumption	126,127	126,316	-.15
Total nitrile			
Production	11,395	9,375	21.55
Imports	2,058	1,844	11.61
Exports	1,770	1,877	-6.20
Apparent consumption	10,643	10,149	4.87
Polybutadiene			
Production	61,271	59,948	2.21
Imports	14,049	8,491	65.46
Exports	10,922	5,032	117.05
Apparent consumption	62,110	58,994	5.28
Ethylene-propylene			
Production	44,174	33,803	30.68
Imports	888	627	41.64
Exports	7,500	6,795	10.38
Apparent consumption	33,060	29,402	12.44
Butyl, polychloroprene, polyisoprene, silicone and other synthetic elastomers			
Production	108,573	93,927	15.59
Imports	15,268	15,121	.97
Exports	23,392	25,641	-9.48
Apparent consumption	96,976	81,954	18.33

Dow Corning opened its $12 million technical development and service facility dedicated to its specialty elastomers business in Midland, MI.

Armtek Corp. finalized the sale of its industrial tire and assembly business division to a subsidiary of **Dyneer Corp.** The agreement covers Armtek's tire production facility in Clinton, TN along with assembly and distribution facilities currently serving the OE and replacementmarkets.

Firestone has withdrawn its closure notice for its Des Moines, IA farm tire plant and will consolidate commercial tire manufacturing at the plant, resulting in the addition of up to 300 new jobs. Firestone also announced it completely divested itself of its South African subsidiary.

Goodyear sold all the shares of its tire manufacturing subsidiary in Kinshasa, Zaire to the **African Holding Co. of America**, a New Jersey corporation.

Lord Corp. acquired full ownership of **Lord-Metzler Automotive Inc.**, a company established as a 50/50 joint venture with **Metzeler Kautschuk** of Munich, West Germany.

Arco Chemical is starting up its idle styrene plant in Beaver Valley, PA to be operational in October. At the same time the company will expand ethylbenzene production at its Channelview, TX plant to meet feedstock requirements for Beaver Valley and the company announced it was opening styrene monomer supply terminals in New Haven, CT and Perth Amboy, NJ.

Emery Chemicals will open a European sales office at Breda in The Netherlands.

Killion Extruders has a new 30,000 sq. ft. building in Cedar Grove, NJ which consolidated its New Jersey manufacturing plant and extrusion equipment laboratory.

Carlisle Syntec Systems opened a regional office and distribution center in Kansas City, KS and one in Denver, CO.

Exxon Chemical will build a methyl ethyl ketone plant, initially manufacturing 230 million pounds annually upon completion in 1988 at its chemical plant in Baton Rouge, LA.

Du Pont is selling its high density polyethylene business and supporting ethylene facilities for $247 million to **Cain Chemical Inc.** of Houston, TX.

Lonza Inc. expanded acetoacet arylamides capacity at its Bayport, TX facility.

Fusion Systems, Rockville, MD acquired the business of **Energy Sciences Inc.**, Woburn, MA a manufacturer of electron beam equipment.

Wacker Chemical purchased the shares held by **Stauffer Chemical** in **Stauffer-Wacker Silicones Corp.**, Adrian, MI.

Contracts, licenses

3M is the exclusive distributor of **Asahi Glass'** Aflas fluoroelastomers in North America and western